

CLAIMS

1. (Currently Amended) A medical system, comprising:

a lead body;

~~an a plurality of adjacent electrodes distributed on an exterior surface of the lead body in a circumferential array of lead electrodes including a selected electrode;~~

~~an assembly of elongated insulated conductors extending through the lead body;~~

~~a lead connector at the proximal end of the lead body including a linear array of lead connector contacts along the lead body, each contact being joined to a corresponding lead electrode of the circumferential array via the assembly of elongated insulated conductors; the array of lead connector contacts including a selected contact corresponding with the first selected electrode;~~

~~a pulse generator device including a header with a connector bore having an electrical contact positioned along the length of the bore and being adapted to receive the lead connector of the lead body at a plurality of positions along the length of the connector bore such that at each position of the lead connector within the connector bore an electrical connection is made between the connector bore electrical contact and a lead connector contact to select an electrode of the circumferential array as a selected electrode, the connector bore including a length and a device contact positioned along the length of the bore and adapted for electrical engagement of each of the array of lead connector contacts; and~~

~~means for reversibly locking the lead connector in place within the connector bore at multiple positions along the length of the bore, the multiple positions corresponding to electrical engagement of a different one of the array of lead connector contacts with the device contact;~~

~~wherein, at one of the multiple positions, the selected contact of the array of lead connector contacts is electrically engaged by the device contact.~~

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2. (Currently Amended) The medical system of claim 1, wherein

the connector bore has a second electrical contact and at each position of the lead connector within the connector bore an electrical connection is made between the second connector bore electrical contact and a second lead connector contact to select an electrode of the circumferential array as a second selected electrode

the array of lead electrodes further includes a second selected electrode;
the array of lead connector contacts further includes a second selected contact corresponding to the second selected electrode; and
the connector bore further includes a second device contact, positioned adjacent to the device contact along the length of the bore; and
the second selected contact of the array of connector contacts is electrically engaged by the second device contact.

3. (Currently Amended) The medical system of claim 1, further comprising:

an additional electrode; and
an additional elongated insulated conductor; and
wherein one of the lead connector contacts further includes a is longer than the other contacts connector contact joined to the additional electrode, via the additional conductor, and positioned adjacent the array of connector contacts, the longer contact having a length approximately equal to a length of the array; and
the connector bore further includes a second device contact positioned adjacent the device contact along the length of the bore, the second device contact electrically engaging the longer connector contact at each of the multiple positions.

4. (Original) The medical system of claim 1, further comprising an insertion tool and wherein the connector bore further includes a proximal opening and a distal opening; the insertion tool adapted to be inserted into the proximal opening of the

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bore and to pull the lead connector through the distal opening of the bore and into the multiple positions.

5. (Original) The medical system of claim 1, wherein the means for reversibly locking the lead connector within the bore at the multiple positions along the bore includes a deflectable member projecting into the bore.

6. (Original) The medical system of claim 5, wherein:

each connector contact in the array of connector contacts includes a surface depression; and

the deflectable member is adapted to rest within the surface depression of each connector contact at each of the multiple positions.

7. (Original) The medical system of claim 5, wherein:

the linear array of lead connector contacts further includes a set of spacers, each spacer of the set of spacers separating each connector contact in the array of connector contacts and each spacer including a surface depression; and

the deflectable member is adapted to rest within the surface depression of each spacer at each of the multiple positions.

8. (Original) The medical system of claim 5, wherein:

the lead connector further includes an array of surface depressions positioned apart from the array of lead connector contacts; and

the deflectable member is adapted to rest within each surface depression of the array of surface depressions at each of the multiple positions.

9. (Original) The medical system of claim 1, wherein the means for reversibly locking the lead connector within the bore at the multiple positions along the bore includes an actuated member.

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10. (Cancelled)

11. (Cancelled)

12. (Withdrawn) A method for selectively coupling a lead electrode, from an array of lead electrodes, to a pulse generator device, comprising:
positioning a lead connector, including an array of connector contacts corresponding to the array of lead electrodes, within a connector bore of the pulse generator device for electrical engagement of a selected connector contact, from the array of connector contacts, with a device contact positioned within the bore; the selected connector contact corresponding to the selected electrode.

13. (Withdrawn) The method of claim 12, wherein the step of positioning the lead connector comprises:
inserting an insertion tool into a proximal opening of the connector bore;
coupling the insertion tool to the lead connector; and
pulling the lead connector into the bore.

14. (Withdrawn) The method of claim 12, further comprising:
reversibly locking the lead connector in the electrically engaged position within the connector bore.

15. (Withdrawn) A method for directing electrical stimulation toward an epicardial surface of a heart comprising:
implanting a circumferential array of lead electrodes in a cardiac vein;
selecting one or more electrodes in contact with the epicardial surface of the heart from the array of lead electrodes;
positioning a lead connector including an array of connector contacts corresponding to the array of lead electrodes within a pulse generator connector bore such that one or more connector contacts corresponding to the one or more

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selected electrodes are electrically engaged by one or more device contacts positioned within the connector bore for electrical coupling of the selected one or more electrodes to the pulse generator.

16. (Withdrawn) The method of claim 15, wherein the step of positioning the lead connector comprises:

inserting an insertion tool into a proximal opening of the connector bore; coupling the insertion tool to the lead connector; and pulling the lead connector into the bore.

17. (Withdrawn) The method of claim 15, further comprising: reversibly locking the lead connector in the electrically engaged position within the connector bore.

18. (Withdrawn) A method for selecting a pair of lead electrodes for electrical coupling to a pulse generator device, comprising: implanting a linear array of lead electrodes; the array of lead electrodes including at least one electrode of the selected pair of lead electrodes; positioning a lead connector, including an array of connector contacts corresponding to the array of lead electrodes, within a connector bore of the pulse generator device for electrical engagement of at least one selected connector contact from the array of connector contacts with a device contact; the at least one selected connector contact corresponding to the at least one electrode of the selected pair of lead electrodes.

19. (Withdrawn) The method of claim 18, wherein the step of positioning the lead connector comprises:

inserting an insertion tool into a proximal opening of the connector bore; coupling the insertion tool to the lead connector; and pulling the lead connector into the bore.

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20. (Withdrawn) The method of claim 18, further comprising:
reversibly locking the lead connector in the electrically engaged position within
the connector bore.